

NE 22. (Unchanged) A method as in claim 19, further comprising evacuating said enclosed area.

REMARKS

Reconsideration and allowance of the above-referenced application are respectfully requested. The foregoing amendments are responsive to the February 3, 2000 Office Action. Applicants respectfully request entry of the requested amendments and reconsideration of the application in view of the following comments.

Response to Drawing Objections

The drawings are objected to because Figure 1 should be designated with a legend such as --PRIOR ART--. Applicant herein adds the legend --PRIOR ART-- to Figure 1. Applicant respectfully requests approval of the drawing change.

Response to Claim Objections and 35 U.S.C. § 112 rejections

Claims 12 and 17 stand rejected under 35 U.S.C. § 112, second paragraph as being indefinite. Claims 15 and 20 are objected to because of improper antecedent basis in the claim language. Applicants amend the claims herein to correct any

indefiniteness and antecedent basis problem and Applicants respectfully submit that all claims now comply with the requirements of 35 U.S.C. § 112.

Response to the Claim Rejections Under 35 U.S.C §§ 102 and 103

Claims 1-2, 6-7, 9-10, and 17 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 3,899,921 issued to Hockley. The rejection asserts that Hockley teaches each element of the claims. Claim 3 is rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,313,679 issued to Wolff, et al. The rejection asserts that Wolff teaches each element of the claim. Claims 4-5, 8, 11-16, and 18-22 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Hockley in view of a variety of secondary references. The rejection asserts that Hockley teaches most elements of the claims, and the secondary references teach the remaining elements.

The present invention is directed toward a method and an instrument for determining periodic motion of structures. The instrument is an imaging interferometer equipped with a pulsed illumination source. The illumination source is pulsed synchronously and with a predetermined relationship to the motion of the structure. Each of the independent claims is

amended herein to require a light source that produces a pulsed output.

None of the cited art teaches or suggests an optical measuring device using a pulsed light source. Further, none of the cited art teaches synchronizing the movement of the imaged device with the pulsations of a light source. Hockley is directed to a laser based object tester. In Hockley, the laser is vibrated by a reference mirror 27. The vibrated laser is then reflected onto the object. However, the laser in Hockley is never pulsed. The light source in Hockley is an Argon ion laser. Nothing in Hockley teaches or suggests pulsing the laser to match the movement of the imaged object. Further, none of the other references teach a pulsed light source or synchronizing the movement of the imaged object with the pulsations of the light source.

In view of the foregoing distinctions, Applicants respectfully submit that independent Claims 1, 3, 6, 15, and 17 are patentably distinguished over the cited art. Applicants respectfully submit that Claims 1, 3, 6, 15, and 17 are in condition for allowance, and Applicants respectfully request allowance of Claims 1, 3, 6, 15, and 17.

Claims 2, 4-5, 7-14, 16, and 18-22 depend either directly or indirectly from one of the independent claims. Each

dependent claim further defines the independent claim from which it depends. In view of the foregoing remarks regarding Claims 1, 3, 6, 15, and 17, Applicants respectfully submit that Claims 2, 4-5, 7-14, 16, and 18-22 are likewise in condition for allowance. Applicants respectfully request allowance of dependent Claims 2, 4-5, 7-14, 16, and 18-22.

Summary

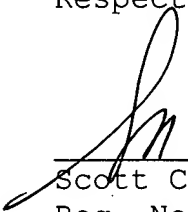
In view of the above amendments and remarks, all of the claims should be in condition for allowance. A formal notice to that effect is respectfully solicited.

Please apply any other charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: _____

6/7/00



Scott C. Harris
Reg. No. 32,030

Fish & Richardson P.C.
4350 La Jolla Village Drive, Suite 500
San Diego, CA 92122
Telephone: (858) 678-5070
Facsimile: (858) 678-5099

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